# **Project Scope**

This program is designed in four phases:

#### Phase 1: Feasibility Study

- Assess campus energy needs and existing infrastructure.
- Identify critical loads and interconnection requirements.
- Conduct site-specific risk assessments (e.g., flood zones, reliability risks).
- Evaluate potential renewable energy and battery storage solutions.
- Develop cost-benefit analyses and financial feasibility reports.

#### **Phase 2: Design and Engineering**

- Finalize technical specifications for microgrid projects.
- Define system architecture, key components, and load requirements.
- Address regulatory compliance and permitting considerations.
- Conduct detailed cost estimations and identify funding commitments.
- Address cybersecurity planning protocols

### **Phase 3: Implementation and Construction**

- Procure necessary equipment (solar, generator, battery storage, control systems).
- Construct and integrate microgrid components into campus infrastructure.
- Conduct system testing and commissioning.
- Train campus staff on microgrid operation and maintenance.
- Develop long-term sustainability and workforce development programs.

## **Phase 4: System Integration & Optimization**

- Implement monitoring and adaptive protection technologies.
- Conduct performance testing and validation.
- Provide training for operations and long-term system maintenance.